

Abstract

A strain of *Lactobacillus salivarius* isolated from resected and washed human gastrointestinal tract inhibits a broad range of Gram positive and Gram negative microorganisms and secretes a product having antimicrobial activity into a cell - free supernatant. The activity is produced only by growing cells and is destroyed by proteinase K and pronase E, the inhibitory properties of the strain and its secretory products being maintained in the presence of physiological concentrations of human bile and human gastric juice. The strain exhibits a broad - spectrum of activity against bacteria including *Listeria*, *Staphylococcus*, including methocillin resistant *St. aureus* (MRSA), and *Bacillus*, but does not inhibit many closely related *lactobacilli*. An antimicrobial agent is obtained from the strain which has bacteriocin-like properties.